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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,004	08/18/2003	George Powell	3271.2.15	2973

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EXAMINER

LABAZE, EDWYN

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/643,004

Applicant(s)

POWELL ET AL.

Examiner

EDWYN LABAZE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/18/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Receipt is acknowledged of IDS filed on 8/18/2003.
2. Claims 1-21 are presented for examination.
3. This application claims the benefits of provisional application No. 60/404,796 filed on 8/19/2002.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Olmstead et al. (U.S. 6,073,851).

Re claims 1, 8, 15, and 19: Olmstead et al. discloses multi-focus optical reader with masked or apodized lens, which includes an image sensor [herein described as CCD arrays or detector] 104 (col.6, lines 55+); a first lens 1102 for focusing light reflected from a graphical code 1105 [herein a graphical code could be in the form of a bar code, data matrix code, Maxicode, and as shown in fig. # 53] to form a first image on a first region 1215 of the image sensor 104, wherein the first lens is separated from the first region of the image sensor by a first distance O1 (col.11, lines 3-15); a second lens 1104 for focusing light reflected from the graphical code 1105 to form a second image on a second region of the image sensor, wherein the second lens 1104 is separated from the second region 1216 of the image sensor by a second distance, and wherein the first distance [Olmstead et al. discloses that the focal length of the first

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lens will be longer than that of the second lens] is greater than the second distance (col.21, lines 25-54); and a decoder 107 for processing image data to obtain information contained in the graphical code 1105 (col.6, lines 65+; col.43, lines 55+). Olmstead et al. further includes a second image sensor 1120 (as shown in fig. # 60E; col.34, lines 37-55). Olmstead further teaches a first magnification and a second magnification and wherein the second magnification power [also known as the object-to-image distance ratio] oriented by the second lens 1104 is lower than the first magnification power (col.21, lines 32-35). Olmstead also discloses three different fields of view 1151, 1152, 1153 [as shown in fig. # 56A], wherein the first field of view is narrower/smaller the second one [and wherein each field of view progressively narrowing from one zone with a shortest focal distance to a zone with a longest focal distance] (col.32, lines 1+).

Re claims 2, 9, 16, and 20: Olmstead et al. teaches an apparatus and method, wherein the first lens 1102 is substantially identical to the second lens 1104 (herein both discloses as aspheric cylinder lens col.21, lines 27-37).

Re claims 3, 10, and 21: Olmstead et al. discloses an apparatus and method, wherein the first lens and second lens are fixed [as shown in figs. # 42] in position (col.31, lines 5-67).

Re claims 4, 11, and 16: Olmstead et al. teaches an apparatus and method, wherein the image data corresponds to either the first image or the second image (col.44, lines 27-67).

Re claims 5 and 12: Olmstead et al. discloses an apparatus and method, wherein the image data corresponds to both the first and second image, and wherein the decoder 1707 is configured to detect suppress redundant image data (col.44, lines 44-63).

Re claims 6 and 13: Olmstead et al. teaches an apparatus and method, wherein a first area between the first lens and the first region of the image sensor defines a first optical path, wherein

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a second area between the second lens and the second region of the image sensor defines a second optical path, and further comprising at least one baffle [herein described as a mask 1091 for preventing spilling rays from one imaging sensor/detector to another one, i.e. preventing light collision] for preventing light in the first optical path from entering the second optical path and for preventing light in the second optical path from entering the first optical path (as shown in figs. # 52; col.20, lines 38-67).

Re claims 7 and 14: Olmstead et al. discloses an apparatus and method, further comprising a third lens 1155c for focusing light reflected from the graphical code to form a third image on a third region of the image sensor, wherein the third lens is separated from the third region of the image sensor by a third distance, and wherein the third distance is greater than the second distance but less than the first distance (as shown in fig. # 56b; col.32, lines 1-27).

Re claim 18: Olmstead et al. teaches an apparatus and method, wherein the first region 1215 and the second region 1216 correspond to distinct partitions of the image sensors 1217 and 1218 (as shown in figs. # 60; col.34, lines 30-50).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lipton et al. (U.S. 5,063,441) discloses stereoscopic video having cameras with image sensors variable effective position.

Correa et al. (U.S. 6,340,114) teaches imaging engine and method for code readers.

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McQueen (U.S. 6,621,063) discloses omni-directional optical code reader using Scheimpflug optics.

Bremer (U.S. 6,689,998) teaches apparatus for optical distancing autofocus and imaging and method of using the same.

Baker (US 2004/0027451) discloses immersive imaging system.

Kogan et al. (US 2004/0159703) teaches interface for interfacing an image engine to an optical code reader.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWYN LABAZE whose telephone number is (571) 272-2395. The examiner can normally be reached on 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

el
Edwyn Labaze
Patent Examiner
Art Unit 2876
September 28, 2004



KARL D. FRECH
PRIMARY EXAMINER